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Keywords: *foreign direct investment (FDI), labor productivity, labor cost, ordinary least square (OLS), textile industry.*

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Sharmin Akter [α] & Md. Bazlur Rahman [σ]

Abstract- Foreign direct investment (FDI) is vital in boosting industrial and economic growth, particularly in developing countries, including Bangladesh. During the last two decades, Bangladesh received a significant amount of FDI in the textile industry, while it has emerged as a major textile exporter with high economic growth. The empirical evidence shows that the availability of a skilled labor force, low labor cost, and favorable investment climate in the host country are the critical determinants of FDI inflows into the manufacturing sectors. This study intends to investigate the impact of labor productivity and labor costs on FDI inflows in the Bangladeshi textile industry. Using the ordinary least square (OLS) regression model, 30-year time series data of the variables were analyzed. The study found that FDI inflows in the Bangladeshi textile sector are significantly determined by labor cost, labor productivity, infrastructure, market growth, and market size. The study results have significant implications for the policymakers of the less developed to developing countries in making policies to attract more FDI inflows generally and in the textile industry.

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I. Introduction

Foreign direct investment (FDI) is an essential driver of economic development in an open and competitive world economy. Developing countries, rising economies, and transition economies increasingly recognize FDI as a catalyst for economic growth, income, and employment opportunities. To attract foreign investment, most countries have liberalized their FDI policies and adopted effective initiatives. UNCTAD (2011) mentioned FDI as a long-term relationship, demonstrating a multinational owner's long-term commitment and control over the local economy. FDI can influence the host country's production system, cost structure, pricing, social well-being, progression, and economic growth (Shah & Ali, 2016; Wang, 2009). According to Noorbakhsh, Paloni, and Youssef (2001), FDI is not only a source of capital and work opportunities but also a means for acquiring skills, technology, managerial and organizational practices, and market access. Therefore, FDI is essential in boosting industrial and economic growth, particularly in developing countries (Djulius, Juanim & Ratnamiasih, 2018).

Moreover, most rich and developing countries believe that FDI aids them in eradicating the problems of poverty and economic hardship (Assunção, Forte, & Teixeira, 2011). It can develop a country's economy by supplementing domestic savings, generating a new employment sector, and improving the technology system and skills of the local workforce (Dupasquier & Osakwe, 2006). Many FDI theories have been developed since the 1960s. These theories proclaim some determinates to explain foreign direct investment flows, including the micro and macro dimensions (Dunning & Lundan, 2008). The micro dimensions are company-specific factors such as ownership structure, cost reduction, and economics of scale. In contrast, the macro dimension consists of the country's resource availability, market size, market growth, and political stability (Faeth, 2009).

The world has faced a large-scale change in geopolitics, economics, and production distribution. BRICs countries (Brazil, Russia, India, and China) play a vital role in manufacturing goods and services in the world economy. BRIC countries attract enormous capital because they have a large population and a larger potential consumer market. Therefore, BRICs have specific destinations for FDI inflows resulting in BRIC- a strong term for FDI coined by the Goldman Sachs Investment Bank (Wilson & Purushothaman, 2003; Vijayakumar, Sridharan, & Rao, 2010) to represent BRIC as an economic Block. Many nations have established favorable policies toward FDI to attain continuous growth in investments and economic development. For example, Ireland attained 10% national income growth per year between 1995 to 2000 using a laissez-faire approach to FDI.

Hymer (1976) (as cited in Denisia, 2010) confirms that investment abroad is related to high costs and risks for multinationals because they are foreign abroad. Therefore, understanding the characteristics and driving factors of FDI inflows to developing countries is crucial for the effective design and implementation of policies to boost FDI inflows, which

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can be helpful for the effective driver of socioeconomic and political development, and enhanced social welfare.

Rising economies, such as Bangladesh, India, Pakistan, and Sri Lanka, have emerged as significant textile exporters in recent years (Dhiman & Sharma, 2017). Bangladesh has the highest economic growth in this sector (Chakrabarty, 2014). Moreover, Bangladesh has an abundance of cheap labor that is easily trainable and convertible into a moderately skilled workforce. As the country's largest exporting industry, with phenomenal growth over the last 25 years, the textile industry employs about four million people directly and more than twelve million indirectly (Hasan, Mia, Rahman, Ullah, & Ullah, 2016). Shortly, a fast-growing industry like the textile sector may only be able to sustain its rapid growth partially through domestic capital. Thus, a solid need to attract Foreign Direct Investment (FDI) to improve production capacity and modernize the entire system has arisen (Chaudhary, 2011). Indeed, in a poor-capital country like Bangladesh, FDI could be a powerful tool for increasing physical capital, creating jobs, developing productive capacity, improving local labor skills, and integrating the domestic economy (Shah, 2013).

Most countries are trying to attract FDI by implementing new policies or strategies. However, FDI inflows to Bangladesh have historically been lower than in other South Asian regions (Shah, 2013). Bangladesh faces some problems with FDI, but the government and related bodies continuously try to change the present scenario (Mahmood, 2018). Typically, foreign investors are attracted to a location when the respective government offers perfect combinations of locational advantages. Due to the high availability and low labor cost, foreign investors are interested in investing in less developed countries like Bangladesh (Shah, 2013). Thus, to help policymakers formulate and establish an attractive FDI-conducive environment and thereby accelerate the country's economic development, this paper examines and evaluates how significant labor productivity and cost are determinants of increasing FDI inflows. The literature on FDI and the determinants that drive FDI is quite rich. In this regard, numerous case studies and surveys have been conducted (Vijayakumar, Sridharan, & Rao, 2010; Barthel, Busse, & Osei, 2011; de Angelo, Eunni, & Fouto, 2010; Seetanah, & Rojid, 2011; Mahmood, 2018; Mahbub, & Jongwanich, 2019; Shah, 2013). However, neither of these studies has worked on labor productivity and cost in the particular sector of the textile industry in Bangladesh. Under this perspective, the current study intends to examine the significant determinants, particularly labor productivity and labor costs, and the impact of labor productivity and labor costs on FDI inflows in the textile sector in Bangladesh.

In this study, using the ordinary least square (OLS) regression analysis, 30-year time series data of variables collected from the databases of the World Bank and Bangladesh Bank were analyzed. The study results indicate that FDI inflow in the textile industry in Bangladesh significantly and positively correlates with labor cost, labor productivity, infrastructure, market size, and market growth. On the other hand, the relationship between FDI inflow in the textile sector in Bangladesh and political risk is insignificant. Also, the current study notifies that upgrading human capital and further infrastructure development is vital to attract FDI inflows into the manufacturing sector in Bangladesh. Finally, the study results will have significant implications for policymakers to help less-developed countries attract FDI in their manufacturing sectors.

After the introduction, the remaining paper is structured as follows: the second section consists of the literature review. The third section discusses the methodology consisting of data, variables, hypothesis development, and regression models. Section four presents the data analysis and findings of the study. The fifth section provides a discussion of the study results. The final part includes the conclusion, limitations, and future research direction.

II. Literature Review

a) *Theoretical Approach*

The rapid growth of global trade and foreign direct investment (FDI) in recent decades (Mohamed & Sidiropoulos, 2010) has spurred much investigation into multinational corporations and the factors that influence FDI (Faeth, 2006). However, the conventional model for identifying the drivers of FDI has been started to use from the earlier research work of Dunning (1973, 1981) that provide a wide-ranging analysis based on ownership, location, and the internationalization (OLI) model (Ranjan & Agrawal, 2011). Thus, many researchers have focused on the factors of FDI and proposed diverse theories to illustrate them. These theories are essential to designing a systematic framework for generating foreign direct investment. According to Faeth (2009), the first theory of FDI was based on the Heckscher-Ohlin (1933) and MacDougall (1960), and Kemp (1964) models, known as the MacDougall-Kemp model, which stated that FDI was driven by increased profitability in overseas markets with growing economies and cheap labor costs and low exchange risks.

Furthermore, Hymer (1976) (cited in Dunning, 1993) and Kindleberger (1969) (cited Cleeve, 2008) argued that market imperfections, including goods and production, are the primary factors for the FDI. Market imperfection theory ensures that if any foreign company

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invests abroad, it relates to two issues. One is the high costs of production of goods, and another is a risk because they are foreign. Also, the theory provides information about the differential acquisition costs due to cultural and language differences. The study of Knickerbocker (1973) (cited in Hill, 2007) on the relationship between FDI and oligopoly as rivalry between firms depicts that FDI is a rivalry strategy of a company in the global market and shows reactive behavior entering into the specific markets. Having imitative behavior, firms follow the internationalization of competitors to protect achieving strategic opportunity (Knickerbocker, 1973). Furthermore, Vernon (1966) developed the product life cycle theory that explains that if a firm invests directly in a country that is an alternative to exporting, goods or products are tracked in the life cycle curve, including growth, maturity, and decline.

Generally, companies want to invest in developed countries in the growth stage because local markets are growing there. On the other hand, in the maturity and decline stages, production is shifted in developing countries to reduce costs as fewer innovative people or processes are required (Hill, 2007). According to Dunning's more holistic approach of eclectic or OLI paradigm, the choice of FDI over other modes of internationalization enjoys some advantages when ownership, locational, and internalization advantages are simultaneously present. Again, based on the theoretical model of Kindleberger (1969), Hymer (1976), and caves (1971) (cited in Faeth, 2009), a "new theory of trade" arose as an extension of Dunning's eclectic paradigm. This new theory of trade combines the advantages of the three variables of OLI (ownership, labor, and internalization) with technology and the intrinsic characteristics of the country in a comprehensive manner (Markusen, 2002). Besides, institutional theory explains how firms manage a complex environment that is uncertain and confrontational. The decisions of a company depend on institutional forces and influence it, and institutional forces are related to regulations and incentives (Francis et al., 2009). Therefore, institutions largely determine the firms' strategies and performance on international markets, called 'rules of the game' (Peng, 2009). In this "Game," the key players are the multinational firms and the host country's government to attract FDI (Faeth, 2009). Governments include tax breaks, subsidies, and easy repatriation of capital as part of policies, influencing the choice between exporting, FDI and licensing.

b) Empirical Review

Loree and Guisinger (1995) and Vijayakumar et al. (2010) investigated the determinants of FDI by the United States towards developed nations from 1977 to 1982. The study includes the country's policy-related variables, which are significant in developed countries, and infrastructure is an essential determinant for all the regions. Sing and Jun (1995) find a positive relationship between taxes on international transactions and FDI inflows to developing countries. Duran (1999) uses panel data and time series techniques to determine a country's FDI drivers. His study notifies the size, growth, domestic savings, solvency, and trade openness as macroeconomic variables. Beven and Estrin (2000) established FDI inflows to economic transition by including determinant factors of country risk, labor cost, the market size of the host country, and gravity factors from 1994 to 1998. Levy-Yeyati et al. (2002) experimented on two extents where one is business cycles, and the other is the interest rate cycles of developed countries. The period of 1980 to 1990 developed countries impacts on FDI flows of developing countries. Aguilar and Vallejo's (2002) study includes the bilateral FDI due to the regional integration contract for Latin America. For the development of both domestic and foreign economics, they use the gravity model.

Furthermore, Nonnenberg and Medonca (2004) find that the factors such as the market size modest by GNP, the growth rate of the product, availability of skilled labor, country risks rating, and stock market behavior are essential determinants of FDI inflows for developing countries. Notably, the variables such as market size, infrastructure and macroeconomic stability, wages, human capital and natural resources are considered determinates of FDI flows from 1991 to 1998. Improvements in human capital, such as skilled labor and education, increase the size of productivity and facilitate technological innovation (Brooks et al., 2010), which positively relates to FDI. Cleeve (2008) used secondary school education to extend human capital. Therefore, it is essential to use adult illiteracy indicators of the education and skills level of the population.

Nevertheless, he did not obtain conclusive results for this indicator either because of the small variable of illiteracy rates of the countries in the sample. Notably, Cleeve (2008) mentioned that stable economic conditions and financial circumstances presuppose general price stability, full employment, and balance of payment equilibrium as helpful for a country to achieve more significant FDI inflows. Some indicators measure this determinant, among which the inflation rate is one of the standard measures since it can gauge price stability, which is a condition of economic equilibrium. In this part, high inflation rates provide information about economic imbalance and may become an obstacle to FDI (Botric & Skuflic, 2006). The scarcity of balance of payment also indicates instability and can limit the free movement of capital, thus hampering the repatriation of profits (Schneider & Frey, 1985). Another study that

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provides some empirical support for the hypothesis that the level of human capital in host countries may affect the geographical distribution of foreign investment is that by Hanson (1996). For a sample of 105 developing countries, he shows political balance and the security of property rights as more important determinants of FDI stock than human capital. The availability of human capital may have been of little importance in explaining foreign investment in developing countries in that period. However, the domestic market growth in host countries is typically a significant determinant of FDI flows to developing countries. The size of local markets should reach a particular local production to be efficient and profitable. Indeed, the continual expansion of the FDI requires favorable market growth prospects.

The textile sector is the most significant contributor to Bangladesh's gross and net export revenues (Hasan, Mia, Rahman, Ullah, & Ullah, 2016). This labor-intensive sector employs many workers, including women, with basic skills (Dhiman & Sharma, 2017). The outcome of the FDI involvement in promoting the textile sector's growth is significant (Djulius, Juanim & Ratnamiasih, 2018). It plays a vital economic role, contributing significantly to industrial production, employment, and exports (Dhiman & Sharma, 2016). Therefore, Foreign Direct Investment (FDI) is acknowledged as a critical and powerful instrument for accelerating economic growth in Bangladesh (Shah, 2013). In this age of globalization, foreign direct investment is skyrocketing. However, the distribution of FDI is not equal over the world. Some nations are ahead of the competition, while others fall behind in attracting foreign direct investment. In terms of attracting FDI, the developing nations are underperforming. Therefore, this study investigates the key determining factors of FDI in the textile sector of Bangladesh.

III. Methodology

a) Data and Variables

In a rigorous literature review, the study identifies a set of potential independent variables determining FDI inflows. In this study, the dependent variable is FDI inflows into the textile sector in Bangladesh. The independent variables include Market size proxied by the GDP per capita (GDPPC), Market Growth proxied by GDP growth (GDPG), Infrastructure proxied by the total number of landlines, cellular connections, and an internet connection, and transport system in Bangladesh (INFRA), Labour Productivity (LABPRO), Labour cost (LABCOST), and Political Risk (POLRISK). In addition, 30-year time series data from 1990 to 2019 of variables were collected from the World Economic Indicators database on the official website of the World Bank and from Bangladesh Bank.

b) Description of Variables and Hypothesis Development

i. Market Size

A large consumer market has more potential for consumption and business opportunities. Comparing the more extensive market with the smaller one, larger consumer markets should receive more profits than smaller markets. In this study, market size is measured by GDP per capita. An econometric study by Artige and Nicolini (2005) also measured the market size of a country by GDP or GDP per capita and found it the most robust FDI determinant. Jordan (2004) mentions that FDI can relate to countries with more extensive and expanding markets with increasing purchasing power. Tsai (1994) and Asiedu (2002) argue that a higher GDP per capita implies better prospects for FDI in the host country, and the expansion of market size tends to stimulate the attraction of FDI to the economy.

Hypothesis 1: The GDP Per Capita (GDPPC) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

ii. Market Growth

A country with a stable macroeconomic condition with high and sustained growth rates will achieve more FDI inflows than a more volatile economy. Higher market growth indicates a potentially more significant market and promising prospects. Therefore, FDI tends to flow to countries with larger market sizes and higher economic growth rates in which larger economies of scale could be provided for FDI to exploit their ownership advantages (Culem, 1988). Market growth exists when the size of the market continues to grow at an increasing rate. Market growth expansion is associated with the flow and organic growth that comes with an increase in population or current customers. The role of growth in attracting FDI has also been the subject of controversy. Chakrabarti (2001) states that the growth hypothesis developed by Lim (1983) maintains that a continuously growing economy provides better opportunities for making profits than a slowly growing economy.

Hypothesis 2: The GDP Growth (GDPG) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

iii. Infrastructure

Infrastructure includes many dimensions, such as a country's roads, seaports, airports, and telecommunication systems. The development of Infrastructure is closely linked with the economic growth of a country. According to ODI (1997), the poor Infrastructure of a country hampers an opportunity for foreign investment. In most low-income countries, it is often cited as one of the significant constraints. Jordaan (2004) claims that good quality and well-developed Infrastructure increase the productivity potential of investments in a country and stimulate FDI flows. The availability of infrastructure facilities helps host countries

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to attract FDI easily. According to Asiedu (2006) and Ancharaz (2003), the number of telephones per 1,000 inhabitants is a standard measurement in the literature for infrastructure development. The Infrastructure of Bangladesh is not well established, which is a significant disadvantage for attracting FDI. On the other hand, it also means that the area offers substantial prospects for investment.

Hypothesis 3: Infrastructure (INFRA) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

iv. *Labor Productivity*

Productivity is the relationship between the quantity of input used to create that output. It measures the organization's effectiveness and efficiency in creating output with the resources available. The Cobb–Douglas production function was used as the basis for measuring labor productivity. The Cobb–Douglas production function is also used to assess the growth of capital assets, employment levels, and advanced technology, which impact a country's overall output of goods and services (Mankiw, 2016).

According to the most recent theoretical models: Human capital is an essential factor in the location strategies of multinational firms (Zhang & Markusen, 1999). Lucas (1990) supposes that lacking human capital discourages foreign investment in least-developed countries. When multinational firms want to produce abroad, they look for literate and proficient workers. Cheng and Kwan (2000) executed an actual and statistically effective relationship.

Hypothesis 4: Labor Productivity (LABPRO) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

v. *Labor Cost*

Labor cost is directly involved with all wages paid to the employees in any firm or institution—production cost of products related to labor cost. If the labor cost increases day by day, it also makes the production cost higher. The labor cost can be delegated by wage rate (Nunes et al., 2006). Theoretically, the higher the labor expenses, the poorer the export performance (Wang, 2013). Also, some studies find a relationship between labor cost and the FDI stream (wheeler & Modey, 1992; Kumar, 1994; Sahoo, 2006). However, another author, Resmini (2000), did not ensure the interpretation of wages because it is not controlled for productivity and exchange rates (Bevan & Estrin, 2004). Cheap labor costs can easily attract FDI because foreign investors are assumed to invest in any host country when they see higher productivity. Therefore, the production costs are lower than in the home country. For cheap labor costs or lower wage rates, investment by foreign investors is increasing daily in the Bangladesh textile sector.

Hypothesis 5: The Labor Cost (LABCOST) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

vi. *Political Risk*

Foreign investment in a country mainly depends on the political stability of the host country. Political risk is one of the significant obstacles to foreign direct investment in both the host and home countries. Political instability continues changing government policy, and fear of government actions is hazardous for investment (Collier & Pattillo, 2000). Some studies form that the evidence of democracy, political instability, or political and economic risk affects FDI effectively and unambiguous (Lansbury et al., 1996; Levis, 1979; Singh & Jun, 1995). However, the relationship between political risk and FDI flows must be clarified. For example, Jaspersen et al. (2000) and Hausmann and Fernandez-Arias (2000) find no relationship between political risk and FDI flow. On the other hand, Schneider and Frey (1985) find out the opposite relationship between FDI flow and political risk.

Hypothesis 6: The Political Risk (POLRISK) Significantly Affects FDI Inflows in the Textile Sector in Bangladesh.

c) Model Selection and Hypothesis Development

i. *Regression Model*

The study used the Ordinary Least Square (OLS) Regression model to investigate the impact of labor productivity, labor cost, market size, market growth, Infrastructure, and political risk on the FDI inflows into the textile sector in Bangladesh. The 30-year dataset was organized to allow us to examine the behavior of FDI inflows into textile industries in Bangladesh and to analyze the time series data across time.

The independent variables included in this study are market size, market growth, Infrastructure, labor productivity, labor cost, and political risk. The dependent variable in this study is FDI in textiles (FDITEX). The study proposes the following model:

$$FDITEX_t = \alpha + \beta_1 GDPPC_t + \beta_2 GDPG_t + \beta_3 INFRA_t + \beta_4 LABPRO_t + \beta_5 LABCOST_t + \beta_6 POLRISK_t + \mu_t \quad (1)$$

Where α is constant term, β is the coefficient of independent variable, μ denotes the error term, FDITEX is the foreign direct investment into textile sector in Bangladesh, GDPPC indicates the total market size of a country proxied by the GDP per capita, GDPG is percentage of GDP growth per year, INFRA is index of total transport infrastructure, and total land lines, cellular connections, and internet connections, LABPRO indicate the total skilled workers available in Bangladesh, LABCOST is the index of workers' payments including compensation and rewards, and POLRISK is the sum of scores of 12 components of political risk in Bangladesh in the year *t*.

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IV. Results

a) Descriptive Statistics

The summary of the descriptive statistics of key variables of the sample is shown in Table-1. Data on the variables have been collected from the World Bank Data Base and Bangladesh Bank for 30 years. During the last 30 years, the average FDI inflow in the textile sector in Bangladesh was $154.898 million, while the maximum FDI inflow per year was $442.92 million. During the same period, the average composite political risk was 50.369, GDP per capita was $696.758, GDP growth was 5.674%, labor cost was $35.285, labor productivity index was 1769.4638, and infrastructure index was 34.76.

Table 1: Summary of Statistics

	FDITEXTILE	POLRISK	GDPPC	GDPG	LABCOST	LABPRO	INFRA
Mean	154.898	50.369	696.759	5.675	35.285	1769.464	34.764
Standard Error	27.063	1.288	82.675	0.215	0.586	94.557	7.958
Median	90.195	50.167	487.377	5.507	34.775	1553.663	5.160
Standard Deviation	148.229	7.053	452.829	1.179	3.212	517.909	43.590
Sample Variance	21972.128	49.743	205054.447	1.392	10.315	268230.359	1900.056
Kurtosis	-0.717	2.809	0.656	-0.491	-1.549	-0.529	-0.923
Skewness	0.889	-1.173	1.299	0.221	0.225	0.849	0.858
Range	439.64	33.917	1562.579	4.667	9.349	1692.041	116.253
Minimum	3.28	29.25	293.161	3.485	31.38	1226.532	0.210
Maximum	442.92	63.167	1855.739	8.153	40.730	2918.574	116.463
Sum	4646.94	1511.076	20902.756	170.241	1058.56	53083.914	1042.930
Count	30	30	30	30	30	30	30

b) Correlation Matrix

In order to evaluate the relationships, it measured the correlation coefficients with the intent of ordering the importance of the variables. Table 2 shows the relationship between all variables, with a particular focus on the relationship between FDI inflow in the textile and garments sector in Bangladesh (dependent variable) and the political risk, GDP growth, GDP per capita, labor cost, labor productivity, and infrastructure (independent variables).

Table 2: Correlation Matrix

	FDITEXTLE	POLRISK	GDPPC	GDPG	LABCOST	LABPRO	INFRA
FDITEXTLE	1.0000						
POLRISK	-0.0450	1.0000					
GDPPC	0.8703*	-0.0895	1.0000				
GDPG	0.6827*	-0.1625	0.8052*	1.0000			
LABCOST	0.8831*	-0.0832	0.9060*	0.8094*	1.0000		
LABPRO	0.9036*	-0.0878	0.9847*	0.8232*	0.9636*	1.0000	
INFRA	0.9346*	-0.1388	0.9688*	0.7797*	0.9385*	0.9841*	1.0000

** Significant at 5%*

FDI inflow in textiles in Bangladesh correlates positively with GDP growth, GDP per capita, labor cost, labor productivity, and infrastructure. On the other hand, the relationship between FDI inflow in the textile sector in Bangladesh and political risk is negative. Therefore, the variables have been ranked and considered only the significant factors that explain FDI inflow in the textile sector. The variables with significant results have been ranked as follows: (1) infrastructure (0.9346), (2) labor productivity (0.9036), (3) labor cost (0.8831), (4) GDP per capita (0.8703), (5) GDP growth (0.6827), and (6) political risk (-0.0450). These could be interpreted that when the significant variables increase, FDI inflow in textiles could also increase.

c) Regression Analysis

Table-3 depicts the multiple regression models of the FDI in the textile sector and labor productivity, GDP growth, GDP per capita, infrastructure, and labor cost. In correlation analysis, the study observed that FDI inflow in textiles in Bangladesh correlates positively with GDP growth, GDP per capita, labor cost, labor productivity, and infrastructure and negatively correlates with political risk. The correlations among the variables are significant other than the political risk. At the same time, in regression analysis, they also significantly affect FDI inflows in the textile sector in Bangladesh.

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Table 3: Regression Models

Variable	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6
Constant	-302.7269* (42.6584)	44.4072* (12.61173)	-1283.247* (144.9847)	-43.60694* (25.18953)	-331.8705* (100.5033)	-150.7297 (289.0604)
LABPRO	0.2586235* (0.0231679)					-0.2879728* (0.1371755)
INFRA		3.178283* (0.2285394)				5.309784* (1.262048)
LABCOST			40.7576* (4.092567)			17.87128 (11.36588)
GDPPC				0.2848978* (0.0304642)		
GDPG					85.77871* (17.35203)	
R^2	0.8165	0.8735	0.7798	0.7575	0.4660	0.8921
Adjusted R^2	0.8100	0.8690	0.7720	0.7488	0.4470	0.8797

** Significant at 5%*

The GDP growth, GDP per capita, labor cost, labor productivity, and infrastructure are commonly significant in correlation and regression analyses. Besides, labor productivity and cost are not significant in all regression models. On the other hand, infrastructure is significant in all models. Ordinary least square (OLS) models were run with each independent variable and a multiple regression model. Model 1 reveals that labor productivity is a significant variable because 81.65% (R^2 = 0.8165) of FDI in the textile sector in Bangladesh is explained by this factor. In Model-6, labor productivity is also more critical to explain FDI because the R^2 is the highest. In Model-2, Model-3, and Model-4, the variables infrastructure, labor cost, and GDP per capita can explain more than 75% of FDI in textiles. However, the GDP growth is significant in Model-5, where the R^2 is the lowest (R^2 = 0.4660) among the six regression models. Labor productivity is significant in both Model-1 and Model-6, and infrastructure is significant in Model-2 and Model-6.

Moreover, the variables labor productivity, infrastructure, labor cost, GDP per capita, and GDP growth are significant in different models. However, political risk is insignificant in both correlation and regression analysis. Therefore, Hypothesis 1, 2, 3, 4, and 5 are accepted among the six hypotheses. On the other hand, Hypothesis 6 is rejected. It can be concluded that

1. The market size and FDI in the Bangladeshi textile sector have a significant positive relationship,
2. The market growth of Bangladesh and FDI in the textile sector has a significant positive relationship,
3. The infrastructure of Bangladesh and FDI in the textile sector has a significant positive relationship,
4. The labor productivity of Bangladesh and FDI in the textile sector has a significant positive relationship, and
5. The labor cost of Bangladesh and FDI in the textile sector has a significant positive relationship.

On the other hand, the political risk has no significant impact on the FDI inflows in the textile sector in Bangladesh.

V. Discussion

The study's result concluded that Bangladesh's labor productivity and FDI in the textile sector have a significant positive relationship. First, the ratio of total output to total labor input is called labor productivity. It depicts labor's performance in associating with other production elements and the proportion of each worker's various contributions (OECD, 2001). Rather than its physical availability, labor's performance efficiency is a more crucial factor in attaining a competitive advantage (Hasan, Mia, Rahman, Ullah, & Ullah, 2016). Secondly, the labor cost is essential and has a positive and robust relationship with the FDI in the textile sector of Bangladesh. Labor costs have a variety of impacts on textile export competitiveness in Asia's emerging countries (Dhiman & Sharma, 2017). Theoretically, the higher the labor expenses, the worse the export performance (Wang, 2013). Wages for RMG employees in Bangladesh are among the lowest in the South Asian regions (Hasan, Mia, Rahman, Ullah, & Ullah, 2016). Therefore, this opportunity brings a competitive advantage to foreign investors. Thirdly, a significant positive connection has been discovered between infrastructure and FDI in the textile sector of Bangladesh. The high-quality infrastructure reduces operational costs, attracting foreign direct investment (Wekesa, Wawire, & Kosimbei, 2016). Also, the study by Wekesa, Wawire, and Kosimbei (2016) found that enhanced transport infrastructure, communication infrastructure, water and waste infrastructure, exchange rate, economic development, and trade openness are significant predictors of FDI inflows into Kenya (Wekesa, Wawire, & Kosimbei, 2016).

GDP per capita and GDP growth of Bangladesh are also other factors that are found to have a positive

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link with the FDI inflow in the textile industry in the country. Similarly, Sabir, Rafique, and Abbas (2019) illustrated that GDP per capita, trade openness, agricultural value added as a proportion of GDP, and infrastructure have significantly positive effects on FDI inflows in developing nations. Lastly, the result showed that the political risk has no significant impact on the FDI inflows in the textile sector in Bangladesh. Conversely, in a study, Osabutey and Okoro (2015) concluded that political risk considerably impacts FDI inflows into emerging economies. Furthermore, Busse and Hefeker (2007) investigated that political indicators such as government stability, internal and external conflict, corruption and racial conflicts, law enforcement, the democratic legitimacy of government, and bureaucratic quality are all significant drivers of foreign investment inflows. On the other hand, most political parameters were shown to have a negative association with global FDI, especially for high-income nations. However, the link was highest for upper middle-income nations considering 94 countries throughout 24 years from 1986 to 2009 (Khan & Akbar, 2013).

VI. Conclusion, Implication, and Future Research Direction

This study mainly focuses on improving foreign investment for expanding the textile sector in Bangladesh. Therefore, the objective of the study was to investigate the significant impact of labor productivity and labor cost on the FDI inflows in the textile sector in Bangladesh. This study found that Bangladesh's labor productivity and labor cost significantly impact the FDI inflows into the textile sector. Similarly, labor cost positively affects FDI in the textile sector in Bangladesh, where a cheap labor force is available. Furthermore, labor productivity increases the productivity level of products, and an increase in the wage level aids in increasing labor productivity with capital formation and labor wage adjustment (Maharani & Setiawan, 2019). Infrastructure also has a positive sign for FDI because infrastructure development in developing countries can easily attract FDI. The study's results also revealed that Bangladesh's GDP per capita and GDP growth are also significant determinants of FDI in the textile sector.

On the other hand, the political risk has been insignificant in this study. However, the political risk was only a factor that did not influence the FDI inflows into the textile sector in the country. Therefore, firms or foreign investors may ignore political risks for the low-cost labor and productive labor available in Bangladesh, which are the most expected and required factors for profitability to the business owners.

The study results have three significant implications for scholars, regulators, and policymakers. Firstly, the study provides new literature in the field of FDI in a specific sector in a nation. Therefore, this study will help scholars further study similar fields in other sectors nationwide. Secondly, the study provides empirical evidence about the positive relationship between labor productivity, labor cost, and FDI inflows into a specific sector. Therefore, the governments and investment authorities will concentrate on developing human capital and infrastructure to attract more FDI in the textile sector in Bangladesh. Thirdly, to attract FDI, the government needs to encourage the transfer of skilled labor and technology to the country to benefit from FDI. This study's results will help policymakers and regulators by guiding the development of FDI inflows into the country.

The study has a limitation because it used an OLS regression model. However, other advanced regression models can estimate the short and long-term effects of the determinants of FDI inflows into the country. Therefore, further study can be carried out using the lag models to estimate the variables' short- and long-term effects on the FDI inflows in other sectors, such as Banking and Insurance, Transportation, and Food and Beverage in Bangladesh.

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